

OIL AND GAS



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Oil production in Iraq has been on the rise since January 2007.²³³ Notwithstanding this recent rise, long-term output remains “constrained by security problems and persistent underinvestment.”²³⁴

Iraq relies on the export of crude oil to generate the funds necessary “to achieve the politically vital goal of ensuring the stable provision and expansion of basic services.”²³⁵ Oil export revenues account for over 70% of Iraq’s gross domestic product and more than 90% of government revenues.²³⁶ Figure 2.40 shows the oil and gas infrastructure across Iraq, including the 4,350-mile pipeline system.

Oil production this quarter averaged 2.09 Million Barrels per Day (MBPD), a decrease of 6% compared to this same period last year, but an increase from the last quarter (1.9 MBPD). Oil production in Iraq has trended

upward since a fall off in January. Oil export output (1.57 MBPD) fell 6% below export levels for this same period last year but are up for 2007.²³⁷ Table 2.12 presents an overview of production output.

Quarterly export levels are affected by the operational status of the northern export pipeline (ITP) that links the Kirkuk oil fields to the Ceyhan terminal in Turkey. This line is regularly attacked by insurgents.

Over the last two quarters, because of attacks, the ITP has not been able to contribute in any meaningful way to the country’s total exports. In May, the ITP pumped only approximately 200,000 barrels of crude oil before acts of sabotage by insurgents²³⁸ knocked the pipeline out of service.²³⁹ Only 2% of oil exports went through Ceyhan last quarter, contributing to an output that was below the Iraqi export target of 1.65 bpd.²⁴⁰ When the northern export lines are not operating, Iraq depends



Figure 2.40

OIL AND GAS INFRASTRUCTURE BY GOVERNORATE

Source: CIA Country Profile Map





CURRENT OIL AND GAS PRODUCTION VS. PRE-WAR LEVEL AND GOAL

	OUTCOMES
Current Oil Production—Capacity*	3.00 MBPD
% change, same period last year** (2.50 MBPD)	20%
% change, Pre-war Level (2.80 MBPD)	7%
Goal (2.80 MBPD)	107%
Current Oil Production—Actual	2.09 MBPD
% change, same period last year (2.23 MBPD)	-6%
Pre-war level (2.58 MBPD)	-23%
Goal (2.64 MBPD)	79%
Export Levels	1.57 MBPD
% change, same period last year (1.67 MBPD)	-6%
Goal (1.65 MBPD)	95%
Natural Gas Production Capacity (MSCFD)	800 MSCFD
% change, same period last year (675 MSCFD)	19%
Goal (800 MSCFD)	100%
Liquefied Petroleum Gas Production Capacity (TPD)	3,000 TPD
% change, same period last year (1,320 TPD)	44%
Goal (3,000 TPD)	100%

Source: Oil Production Capacity, Natural Gas Production Capacity, and Liquefied Petroleum Gas Production Capacity figures come from USACE, response to SIGIR, June 9, 2007. Oil Production Actual, Oil Production Actual Goal, and Export Levels are taken from ITAO, Oil monthly import production and export spreadsheet, July 11, 2007.

*Oil Production Capacity, Natural Gas Production Capacity and Liquefied Petroleum Gas Production Capacity are not measured in quarterly average but total capacity available.

**Same period last year comparison refers to quarterly output as reported by SIGIR in July 2006.

TABLE 2.12



heavily—almost exclusively—on the Al Basrah Oil Terminal (ABOT), the southern export node. Figure 2.41 shows the status of crude oil production by northern and southern region.

GOI Fuel Subsidies

In accordance with the IMF Stand-By Arrangement (SBA), Iraq's Ministry of Oil raised the prices this quarter of gasoline, blended gasoline, and diesel.²⁴¹ Iraq has been phasing in a significant increase in domestic fuel prices, which reduces the government subsidies for many fuel products.²⁴² Table 2.13 compares IMF goals for refined fuel increases with actual price increases.

Pursuant to the SBA, Iraq's 2007 budget allocates significantly less money (\$300 million) to the subsidy of fuel imports than it did in 2006; however, the Ministry of Oil continues to subsidize gas, diesel, and other domestically produced refined products



Iraqi Oil Refinery. Iraq lacks the domestic capacity to meet demand for refined fuels.

because Iraq lacks the domestic capacity to meet demand for refined fuels.²⁴³ Consequently, although it is one of the largest producers of crude oil in the world, Iraq must still import kerosene, gasoline, diesel, and liquefied petroleum gas (LPG).

Figure 2.42 shows the status of Iraq's refined fuel production this quarter compared to performance over the last three years.

PRICE INCREASES FOR REFINED FUELS (\$ PER GALLON)

	SEP. 2005	PRIOR ACTION	3/31/2006		6/30/2006		9/30/2006		12/31/2006		6/30/2007	
			GOAL	ACTUAL	GOAL	ACTUAL	GOAL	ACTUAL	GOAL	ACTUAL	GOAL	ACTUAL
Regular Gasoline	\$0.05	\$0.26	\$0.33	\$0.26	\$0.40	\$0.45	\$0.45	\$0.45	\$0.54	\$0.68	\$0.91	\$1.06
Premium Gasoline	\$0.13	\$0.64	\$0.77	\$0.64	\$0.90	\$0.90	\$1.03	\$0.90	\$1.23	\$0.95	—	—
Blended Gasoline	—	—	—	—	—	—	—	—	—	\$0.95	\$1.21	\$1.36
Kerosene	\$0.01	\$0.06	\$0.13	\$0.06	\$0.19	\$0.19	\$0.23	\$0.19	\$0.31	\$0.20	\$0.45	\$0.61
Diesel	\$0.03	\$0.23	\$0.28	\$0.23	\$0.32	\$0.32	\$0.40	\$0.38	\$0.48	\$0.41	\$1.06	\$1.06

Sources: IMF, Country Report No. 07/115, March 2007; Conversion rates: IMF, response to SIGIR, July 19, 2007.

Note: Prices have been converted from Iraqi dinars per liter to U.S. dollars per gallon. These are the conversion rates used, by date: December 2005—1,474 ID/\$, March 2006—1,476 ID/\$, June 2006—1,477 ID/\$, September 2006—1,475 ID/\$, December 2006—1,391 ID/\$, June 2007—1,250 ID/\$.

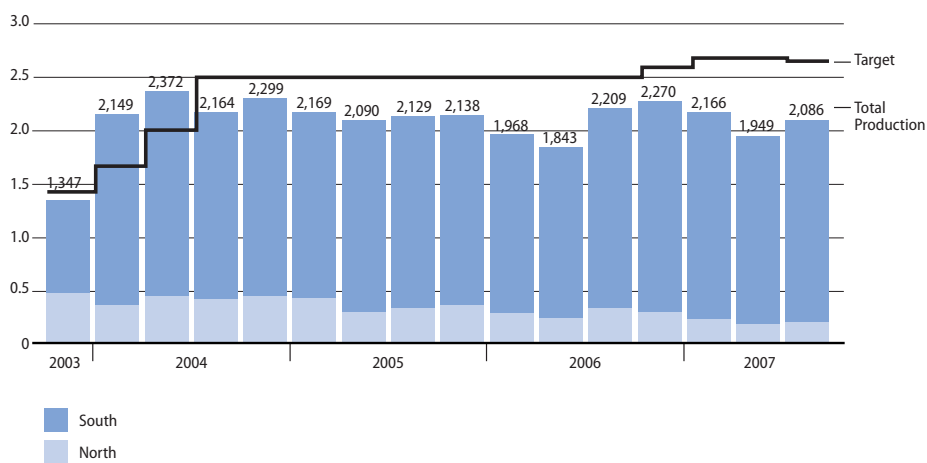
TABLE 2.13



Figure 2.41

CRUDE OIL PRODUCTION BY REGION

Millions of Barrels per Day, Quarterly Average

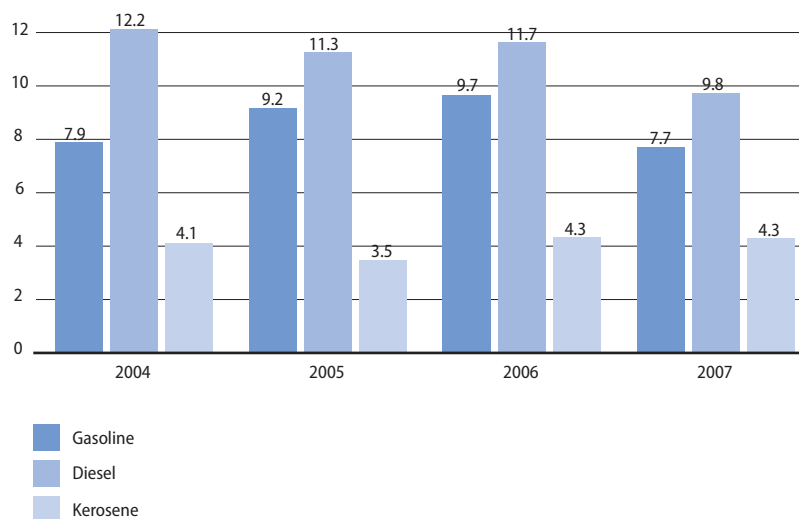
Source: ITAO,* *Monthly Import, Production, and Export* (June 2007)

* By Executive Order, on May 8, 2007, the President created ITAO as the successor organization to the IRMO.

Figure 2.42

SUMMER FUEL REFINERY PRODUCTION 2004 - 2007

Millions of Liters

Source: ITAO,* *Monthly Import, Production, and Export Report* (June 2007)



Hydrocarbon Legislation

The *Initial Benchmark Assessment* noted that “the Government of Iraq has not met its self-imposed goal of May 31, 2007, for submitting the framework hydrocarbon and revenue sharing laws to the [Council of Representatives].” GAO reported this quarter that “until this legislation is enacted and implemented, it will be difficult for Iraq to attract the billions of dollars in foreign investment it needs to modernize the sector.”²⁴⁴

Since September 2006, the GOI and U.S. government sources have been reporting on the impending finalization of the hydrocarbon legislation. Despite previous reports of imminent passage in September 2006, December 2006, February 2007, and June 2007, the legislation has yet to be fully addressed by Iraq’s Council of Representatives (COR).

DoS recently expressed confidence that the hydrocarbon legislation was “weeks rather than multiple months”²⁴⁵ away from passage.

The hydrocarbon legislation is a series of four separate laws, establishing:²⁴⁶

- a framework for lines of authority
- revenue sharing
- a national oil company
- a regulatory role for the Ministry of Oil

Without this legislation, development in the oil sector will remain stalled.

This quarter, Iraqi oil workers went on strike over unmet demands, including representa-

tion in the hydrocarbon law’s drafting process.²⁴⁷ The main impact of the strike was the shutdown of two oil product pipelines feeding Baghdad.²⁴⁸

Report on Corruption

SIGIR previously reported on the detrimental effects of oil smuggling on Iraq’s vital source of revenue. In a recent report, GAO confirms that “about 10% to 30% of refined fuels is diverted to the black market or smuggled out of Iraq and sold for profit.”²⁴⁹ GAO also reported that “as much as 70% of the fuel processed at Baiji was lost to the black market, possibly as much as \$2 billion a year.”²⁵⁰

U.S. Support

IRRF and CERP projects in Iraq have supported the continued development of oil production facilities and export infrastructure. For the distribution of funding in this sector, see Figure 2.43. Figure 2.44 shows the status of U.S. funds in the sector.

This quarter, GRD reports that projects met their program goals.²⁵¹ These goals included:

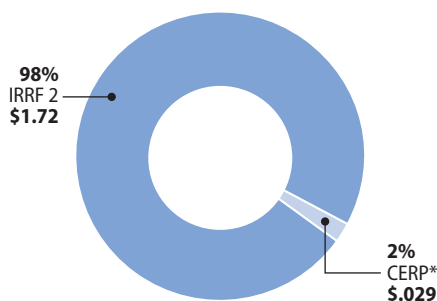
- increasing Iraqi oil production capacity to 3 million barrels per day (MBPD)
- increasing liquefied petroleum gas (LPG) capacity to 3,000 metric tons per day
- increasing natural gas production capacity to 800 standard cubic feet (SCF)



Figure 2.43

ALLOCATIONS TO OIL AND GAS

\$ Billions, % of \$1.75 Billion

Sources: DoS, *Iraq Weekly Status* (6/27/2007); MNC-I, Response to SIGIR (7/7/2007)

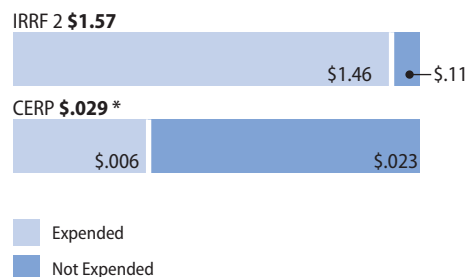
Note: Numbers are affected by rounding.

*Allocation detail at the sector and subsector level for CERP is currently unavailable; therefore, the percentages for CERP are calculated using FY 2006 and FY 2007 dollars obligated.

Figure 2.44

OBLIGATIONS FOR OIL AND GAS

\$ Billions, \$1.60 Billion Total

Sources: DoS, *Iraq Weekly Status* (6/27/2007); MNC-I, Response to SIGIR (7/7/2007)

Sector progress continues to face several familiar challenges. The impact of slow budget execution and poor O&M inhibit growth. Iraqi Ministry of Oil officials face significant challenges in developing an effective contracting and procurement process. The contracting rules are reportedly so constricting that when conducting oversight on the rules, Iraqi inspectors “wreaked havoc with charges of corruption.”²⁵²

As of July 7, 2007, the Ministry of Oil reported that it had spent 23% of its \$2.4 billion 2007 capital budget.²⁵³ A review of last year’s Iraqi capital budget revealed a very poor capital expenditure rate in the oil sector; the Ministry of Oil has committed to improving budget execution in this sector.

IRRIF

Just 9% of IRRIF 2 funds were allocated to oil and gas reconstruction in Iraq. As of June 27, 2007, approximately \$1.46 billion of the sector’s \$1.72 billion IRRIF allocation had been expended.²⁵⁴ U.S. reconstruction officials reported that all IRRIF construction projects in this sector are complete, and only infrastructure security projects remain underway (see Figure 2.45).²⁵⁵

IRRIF construction projects included well workovers and gas oil separation plants (GOSPs) in the Rumaila oil fields, near Basrah. The IRRIF also funded oil services projects in Iraq through the procurement of materials (such as water injection pumps for the southern oil fields), training, spare parts, service agreements, and capacity development.



Although it is one of the largest producers of crude oil in the world, Iraq must import kerosene, gasoline, diesel, and liquefied petroleum gas.

The major completed and ongoing IRRF-funded projects include:

- **Qarmat Ali:** Engineering and procurement work provided treated water for injection wells to maintain oil reservoir pressure.
- **Al Basrah Oil Terminal (ABOT):** Meter installation work continues, and work on the loading-arm refurbishment at berths 1-4 is complete. Last quarter, SIGIR inspected ABOT and found that refurbishment and repair work met the original objectives.

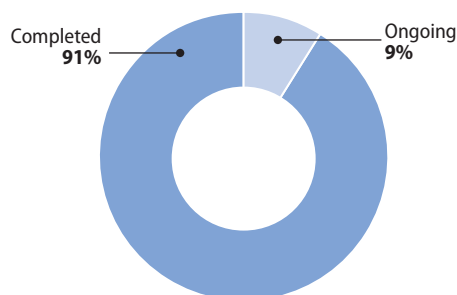
- **Gas Oil Separation Projects:** In the south, 12 gas oil separation plants were refurbished, with the potential to increase capacity by 600,000 BPD. In the north, eight were refurbished, with the potential to increase capacity by 300,000 BPD.
- **Shuaiba Refinery Power Plant:** Completed last year, this plant provides long-term power supply to Basrah Refinery.
- **South Well Workover:** Work is complete at 30 wells in the Basrah governorate to

Figure 2.45

STATUS OF IRRF 2 PROJECTS - OIL AND GAS

TOTAL NUMBER OF PROJECTS: 46

Sources: IRMS, ITAO* Rollup (6/29/2007); USAID, Activities Report (7/12/2007)



Project Type	Not Started	Ongoing	Completed	Total
Southern Region Projects		3	11	14
Northern Region Projects			11	11
Water Injection Pump Station			9	9
Dedicated Power		1	5	6
LPG/LNG Plant Refurb			5	5
General Projects			1	1
Total		4	42	46



Al Basrah Oil Terminal. Meter work continues to improve the ability of the Iraqi government to monitor oil exports.

increase oil production capacity by more than 300,000 BPD.

CERP

CERP FY 2006 and FY 2007 oil projects represent a small fraction of both total U.S. funds and total CERP funds spent in the oil sector in Iraq. Specifically, the sector received approximately \$30 million of CERP FY 2006 and FY 2007 funds—2% of the funds allocated to the oil sector in Iraq. This sector received only 3% of total CERP FY 2006 and FY 2007 funds.

Because all IRRF-funded construction projects in this sector are complete and IRRF funding for oil projects in Iraq is nearly expended, CERP represents a potential source of new U.S. funding for projects in the oil and gas sector. As Figure 2.46 shows, many CERP oil projects in Iraq average more than \$100,000 in value.

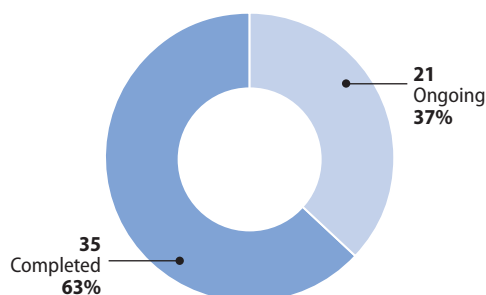
In 2005, four provinces had CERP oil and gas projects valued at more than \$200,000. In 2006, this proportion decreased slightly to three, although project values averaged more

Figure 2.46

STATUS OF CERP FY 2006 AND FY 2007 PROJECTS - OIL AND GAS

TOTAL NUMBER OF PROJECTS: 56

Source: MNC-I, Response to SIGIR (7/7/2007)





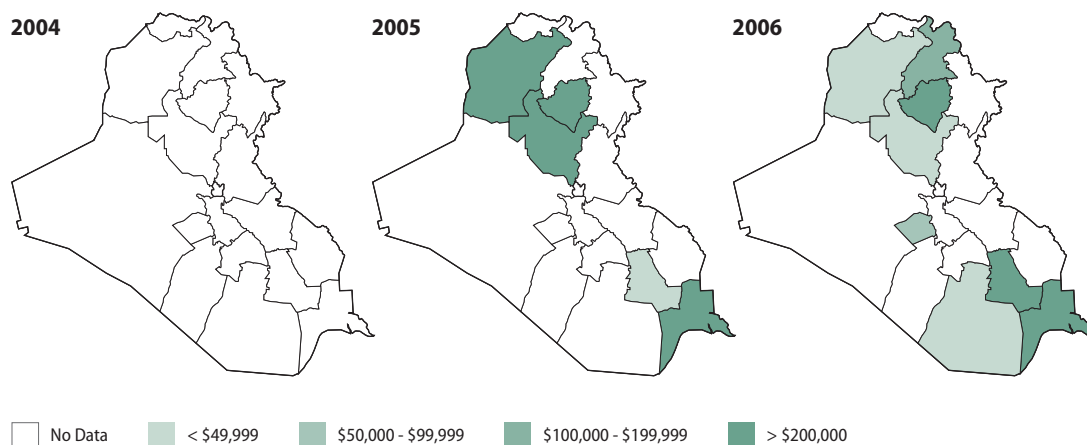
than \$500,000. This quarter, SIGIR announced a review of large CERP projects in Iraq, specifically those valued at more than \$400,000.

CERP FY 2006 and FY 2007 monies funded 56 oil projects across Iraq. The largest CERP oil projects occur in Basrah. Figure 2.47 shows the average value per CERP oil project by governorate in Iraq over the past three years.

Figure 2.47

AVERAGE VALUE PER CERP OIL PROJECT BY GOVERNORATE

Source: IRMS, CERP Excel Workbook (6/29/2007)



Note:

Data is compiled using FY 2004, FY 2005, and FY 2006 CERP funds. The years indicated correspond to the actual start dates of the projects.